

Abstract 333

TITLE: Semen Exposure During Female Condom Use

AUTHORS: Ann Duerr, Maurizio Macaluso, Louise Lawson, Glen Hortin, Karen Hammond, Richard Blackwell, Amy Bloom

BACKGROUND/OBJECTIVES: The female condom has been proposed as a barrier method for STD/HIV prevention among women at risk. To measure the rate of female condom failure, prostate specific antigen (PSA) in vaginal fluid was used as a marker of semen exposure; whether semen exposure is associated with user-reported problems was also evaluated.

METHODS: Women at low STD risk (N=210) were recruited from among University of Alabama, Birmingham, (UAB) staff and students, and from the community. They were trained to use the female condom and a vaginal self-sampling device, and to complete coital logs and questionnaires detailing the occurrence and potential determinants of female condom breakage.

RESULTS: Of 2,322 uses of the female condom, 25% resulted in at least one reported problem. The overall rate of semen exposure was estimated to be 7 to 22%. Semen exposure was more likely to occur if the participant reported a mechanical problem such as condom breakage, the penis entering outside of the condom, the outer ring moving into the vagina, or semen leaking from the condom. Mechanical problems were reported during use of 247/1,485 condoms (17%). The estimated rate of semen exposure in the group reporting mechanical problems was 23.4%. Only non-mechanical problems, such as discomfort of either partner, were reported during use of 77 condoms (5%), and no problem was reported during use of 1,161 condoms (78%). The estimated rate of semen exposure, 5.20%, was similar in the latter two groups. Multiple regression analyses indicated that reported problems could account for at most 59% of the instances of semen exposure.

CONCLUSIONS: User problems appear to be common during female condom use. Semen exposure was clearly correlated with user-reported problems, but occurred at a high rate even in the absence of reported problems.

PRESENTER CONTACT INFORMATION

Name: Ann Duerr MD, PhD, MPH

Address: National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
1600 Clifton Road, NE, Mailstop K-34
Atlanta, Georgia 30341

Telephone: (770) 488-5250

Fax: (770) 488-5965

E-mail: axd9@cdc.gov